

gradient of at least 1:6 under standard sea level conditions.

(Secs. 313(a), 601, 603, 604, and 605 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1421, 1423, 1424, and 1425); and sec. 6(c), Dept. of Transportation Act (49 U.S.C. 1655(c)))

[Doc. No. 5084, 29 FR 16150, Dec. 3, 1964, as amended by Amdt. 29-15, 43 FR 2326, Jan. 16, 1978; Amdt. 29-39, 61 FR 21900, May 10, 1996; 61 FR 33963, July 1, 1996]

§ 29.67 Climb: One engine inoperative (OEI).

(a) For Category A rotorcraft, in the critical takeoff configuration existing along the takeoff path, the following apply:

(1) The steady rate of climb without ground effect, 200 feet above the takeoff surface, must be at least 100 feet per minute for each weight, altitude, and temperature for which takeoff data are to be scheduled with—

(i) The critical engine inoperative and the remaining engines within approved operating limitations, except that for rotorcraft for which the use of 30-second/2-minute OEI power is requested, only the 2-minute OEI power may be used in showing compliance with this paragraph;

(ii) The landing gear extended; and

(iii) The takeoff safety speed selected by the applicant.

(2) The steady rate of climb without ground effect, 1000 feet above the takeoff surface, must be at least 150 feet per minute, for each weight, altitude, and temperature for which takeoff data are to be scheduled with—

(i) The critical engine inoperative and the remaining engines at maximum continuous power including continuous OEI power, if approved, or at 30-minute OEI power for rotorcraft for which certification for use of 30-minute OEI power is requested;

(ii) The landing gear retracted; and

(iii) The speed selected by the applicant.

(3) The steady rate of climb (or descent) in feet per minute, at each altitude and temperature at which the rotorcraft is expected to operate and at any weight within the range of weights for which certification is requested, must be determined with—

(i) The critical engine inoperative and the remaining engines at maximum continuous power including continuous OEI power, if approved, and at 30-minute OEI power for rotorcraft for which certification for the use of 30-minute OEI power is requested;

(ii) The landing gear retracted; and

(iii) The speed selected by the applicant.

(b) For multiengine Category B rotorcraft meeting the Category A engine isolation requirements, the steady rate of climb (or descent) must be determined at the speed for best rate of climb (or minimum rate of descent) at each altitude, temperature, and weight at which the rotorcraft is expected to operate, with the critical engine inoperative and the remaining engines at maximum continuous power including continuous OEI power, if approved, and at 30-minute OEI power for rotorcraft for which certification for the use of 30-minute OEI power is requested.

[Doc. No. 24802, 61 FR 21900, May 10, 1996; 61 FR 33963, July 1, 1996, as amended by Amdt. 29-44, 64 FR 45337, Aug. 19, 1999; 64 FR 47563, Aug. 31, 1999]

§ 29.71 Helicopter angle of glide: Category B.

For each category B helicopter, except multiengine helicopters meeting the requirements of § 29.67(b) and the powerplant installation requirements of category A, the steady angle of glide must be determined in autorotation—

(a) At the forward speed for minimum rate of descent as selected by the applicant;

(b) At the forward speed for best glide angle;

(c) At maximum weight; and

(d) At the rotor speed or speeds selected by the applicant.

[Amdt. 29-12, 41 FR 55471, Dec. 20, 1976]

§ 29.75 Landing: General.

(a) For each rotorcraft—

(1) The corrected landing data must be determined for a smooth, dry, hard, and level surface;

(2) The approach and landing must not require exceptional piloting skill or exceptionally favorable conditions; and

(3) The landing must be made without excessive vertical acceleration or tendency to bounce, nose over, ground loop, porpoise, or water loop.